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Mr. Emory L. Brown, Jr.
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Dear Mr. Brown,

Thank you for your long and interesting letter of 12 September. I can only apologize for the lack of reprints, and cannot understand this, since we dispense them liberally to interested people like yourself. I hope you will have received a set of our reprints by now, but if not, please let me know so that we can send you another set.

Like yourself, our understanding of the matter through experimentation has caused us to change our views as time has gone on, so that some of our original thoughts have been modified in later publications. I suspect this process will continue, as we try to unravel more of the threads of the problem.

I am very pleased to encounter somebody who was interested in experimentation rather than just complaining, or doing just library research. I am not against either of the first two, but I have a much greater respect for experimentators.

I would like to start by saying that it is very important to exactly duplicate the circumstances of the Kennedy shooting as to the type of rifle, the type of ammunition, etc. If you do not do this, you get different results. I think that this accounts for some of your results with the fragments of bullets, where you used Italian ammunition. How many failures-to-fire did you have?

It is also important to duplicate the wounds fairly precisely. For example, Dr. Olivier was told to aim at a point much too low on his skulls and he had to use old, dried skulls. It is a surprise to me that he got even as similar a type of wound as he did. A fresh skull, struck high on the back of the head, as we have been doing, gives somewhat different results.

The head wound has two phases. In the first phase, the bullet strikes the back of the skull and fragments. It makes only a small entrance wound, although it may deposit a fragment at this point, but the disrupted jacket and core then proceeds forward through the brain, with the fragments diverging somewhat, and leaving the head through the area of the forehead and just above it, creating a large wound of exit. These fragments are usually deflected up, apparently because the base of the skull is more solid than the dome. These fragments have very little force but could strike the frame of the windshield and the glass of the windshield without doing too much damage, and then drop into the front seat of the car, quite understandably. Other fragments, however, would proceed over the windshield and down the street to kick up dust, as some people reported. Our experiments showed this phenomenon repeatedly.

The second phase of the head wound is the effect of the cavity forming within the brain. This expands in all directions and literally blows the skull into a dozen fragments, some of which fly as far as 90 feet. I suspect that some of the fragments of President Kennedy's head were never recovered. While the fragments adjacent to the big wound of exit will escape, most of the other fragments, while broken up, will be retained by the tough scalp. While the bursting effect gives an explosive reaction in all directions, the largest amount of heavy liquid or semi-liquid brain content goes out through the front of the head through and around the large wound of exit. This causes a "jet-engine" effect, which drives what is left of the head off the stand backwards, towards the gun. It also moves markedly to the left, if one strikes the skull exactly where President Kennedy was struck, namely on the upper right side. We have repeated this experiment over and over and the results are remarkably consistent. The backward movement of President Kennedy's body is mostly due to stiffening of the body as the massive downward discharge of brain impulses goes down the spinal cord, stimulating all of the muscles, but the strongest ones "of the back" will predominate, and pull the body more or less erect. He was already leaning towards the left, and between the jet-engine effect and the stiffening of his body, it was not surprising to see his body lurch backwards and to the left.

In our reprints you will see comments on so many of the questions you raise that I would ask you to read the reprints carefully and then come back to me with any additional questions, since I can write all day and all night on the topics which you raise.

With regard to the single bullet deduction, I can only tell you what the "Lattimer Reconstruction" offers, as a result of our study and experimentation.

If a bullet like 399 does not strike bone directly, it has tremendous penetrating capability. It requires a pile of Ponderosa Pine boards 47" thick to bring this bullet to a halt, and when you dig the bullet out of this block of wood, it looks completely undisturbed. You get the same effect with other types of wood, and the distance of penetration depends upon the characteristics of the wood.

It is my deduction that the bullet struck the tip of a transverse process of a vertebra in the neck, (C6 or C7) knocking off two tiny chips of bone, which had been characterized by the 1968 review panel as metal, rather than bone. I will correspond with the man who made this interpretation to see whether he would consider it equally possible that they might be bone. It was my reasoning that when you turned the body these chips would continue to show up against the vertebrae, if they were metal. On the other hand, if the chips were bone, they would not be visible when you turned the body so that the chips were superimposed on the other bones of the neck. This is what happens. You cannot see them in any view except the one where the x-ray beam is tangential to them and shows them out in the soft tissues, away from the bones a short distance. I do not think it is possible to tell whether the chips are metal or bone but for my hypothetical reconstruction, I would deduce that they are probably bone rather than metal. If the bullet hit bone hard enough to break off chips of metal, there would have been additional chips, of both bone and metal, and the fragments of the bullet would then have made multiple wounds of exit, in all probability. There was no sign of this.

In answer to your question, we are all looking at the same x-rays, but it is possible that the chips might be either bone or metal. The doctors were prohibited from opening up the neck wound so there was no opportunity to retrieve them.

In answer to your second question, the tracheostomy was quite large, and a large tube had been inserted through it. This would make a semi-circular dent in the margin of it, which would not necessarily be related to the bullet wound. In inspecting these photographs, which are quite spectacular in the excellence of their quality, I could not be sure where the bullet hole had been, which Dr. Perry had transected when he made his tracheostomy incision.

The bullet fragments in the head conform to the description of Dr. Humes, when you look at the x-rays, as I recollect it. They would not let me copy the x-rays directly, but would permit me to make sketches. I noted the fragments more or less as described by the panel. You will see them in the drawings, in the reprints which are enroute.

In reply to your paragraph 4, the bullet hole in the back was about the same size as these bullets, but was slightly ovoid in a transverse direction, because of the way the tissues of the neck act, when the head is pulled back. The photographs are very good and I cannot see any discrepancy in the fact that it was too small to admit a finger.

The matter of angles is relatively absurd, in my opinion. Both men were twisted somewhat at the moment they were hit, and it is ridiculous to take drawings of their bodies facing straight ahead and pretend that they are plaster statues so that you could look back through the bullet holes in these plaster statues and see which windows the bullet holes pointed at, 200 ft. or 250 ft. away. Human bodies are much more like bags of jelly suspended from coat hangers, and when you twist them around, the angles of the bullet holes are completely useless for precision purposes, in my opinion.

No. 6 is related to your photographs of a gentleman whom I assume must be yourself, with the coat and shirt on and off. Remember that the President wore a back brace and that there are several photographs of his coat and shirt humped up on the back of his neck, including one of those taken very shortly before the first bullet must have struck him. Your "victim" is not "seated", as President Kennedy was.

I was particularly interested in your photograph of the back of one of your men, where the lower bullet wound is almost exactly where the bullet wound in President Kennedy's neck appears. What you do not realize is that he had an unusual roll of muscle tissue across the back of his neck, possible related to the adrenal hormones that he had been taking for years, or possibly related to his capability as a swimmer. In any case, this clearly indicates why the bullet course could have been exactly as the Warren Commission indicated, and the photographs of the body show that it is indeed that way. Again, I see no discrepancy in the location of the bullet holes, and your drawings are surprisingly supportive of the Warren Commission Contentions.

The disparities between the location of the bullet holes stated by the autopsy surgeon and the later findings on the x-rays are understandable when you realize that they took these x-rays and photographs with the objective of using them as the basis for an accurate and dependable autopsy report. When they were not permitted to see the photographs at all, and could only get a quick glimpse at the x-rays, they then had to make up their autopsy report from memory and from their naturally diagrammatic and hasty notes. It is not fair to condemn them for doing a poor autopsy and writing a poor autopsy report, when the basis for a very good autopsy report was prepared by them and then taken away from them in the frustration and grief of the moment, since no one wanted the family to have to see the bloody stump of their father's head in every bookstore window. This is what would have happened had the Commission made these photographs part of the official record. It is too bad they did not permit the x-rays to be released, because they are quite informative and would have dispelled many of the questions.

Both the photographs and the x-rays leave no doubt as to the exact location of the wound in President Kennedy's head.

With regard to the course of the bullet which went through the President's neck, it is necessary to account for where this bullet went, in the car. If it did not go into the back of Governor Connelly, where did it go? As you know, it can do tremendous damage and the wound in the car would have been very obvious, if it had missed Governor Connally. Governor Connally says he was leaning to look back over his right shoulder at President Kennedy after hearing the first shot, and when one does this one leans markedly to ones left, in order to try to see directly backwards. I believe this accounts for why the bullet hole is in the right side of his back rather than the left side of his back, but in any case, it would have hit him somewhere.

The bullet hole in Connally's back was elongated, and the surgeon who described it described it first as 3 cm long in his operative report done under very precise conditions at the end of the operation. He then changed his story gradually to make it 1-1/2 cm in latter versions. In any case, it was probably a tumbling bullet that struck Governor Connally, although the possibility of a tangential strike does naturally exist. It is my experience that these bullets make a much worse wound if they strike tangentially, however, and our experiments indicate that bullets passing through a simulation of President Kennedy's neck do tumble as much as 90° in the distance involved, and sometimes turn further, so as to be going partly backwards. The fact that lead protrudes from the back of the flattened jacket of 399, makes me believe that the bullet was indeed going a little backwards when it struck Governor Connally, was flattened by striking his rib a glancing blow, causing the lead to protrude. This lead was then scraped off on the bone of the wrist, as the bullet went tengentially through this bone at greatly reduced speed and embedded itself in Governor Connally's leg going backwards. It left a last piece of lead on his femur, before being knocked out onto the stretcher. If it had struck his wrist directly or even as a new wound, it would have shattered the bone severely, as demonstrated by Dr. Olivier and by ourselves. The wounds of the wrists are very mild, with the fragments not displaced, indicating that the bullet was either travelling very slowly or hit the bone only a glancing blow. Had it not been remarkedly slowed down it would have shattered his leg bone in a million pieces, as we have demonstrated. The particles removed from Governor Connally's wrist were lead, rather than copper, indicating that the bullet was probably travelling backward at that time.

The final indication that Governor Connally was not struck at a different time was the fact that his right wrist, in which he held his hat, had to be down on his left knee in order to be struck by the same missle. You can see his hat come up to the edge of the car as he makes his reflex contraction of his arm as he begins to recover from the stunned condition of being hit, almost immediately after President Kennedy is hit. This means to me that he was not struck by anything that went through his wrist at any later point.

Governor Connally's chest had been torn open and his nerve and rib-ends exposed by the bullet passing through and along them and as he recovered from his stunned condition he then tried to take a breath and the motion of his chest wall was excruciatingly painful. He then clamped his right arm hard against his chest wall to splint it, resulting in the downward motion of his shoulder and the change in his facial expression. His mouth then dropped open in pain, as seen in the movie.

I will be happy to have you pick my theory to pieces and to hear what your theory is in rebuttal.

Warmest regards,

John K Lattimer

John K. Lattimer, M.D., Sc.D.

JKL/dg

(Signed in Dr. Lattimer's absence)